

Amendments to the Claims

This listing of claims is intended to replace all prior versions and listings of claims in the above-identified application.

1-12. (cancelled)

13. (currently amended) A method of inhibiting the growth of a cancer cell comprising:

providing a composition comprising a caspase inhibitor and a non-caspase inhibitor anti-cancer agent, wherein the non-caspase inhibitor anti-cancer agent is selected from the group of an anti-metabolite, a DNA interactive agent, a topoisomerase inhibitor, a tubulin interactive agent, and an anti-hormonal agent; and

introducing the composition of claim 1 to the cancer cell, whereby said introducing is effective to enhance inhibition of the cancer cell growth, as compared to that caused by the anti-cancer agent alone.

14. (previously presented) The method of claim 13, wherein the cancer cell is killed.

15. (currently amended) A method of treating a subject having cancer comprising: providing a composition comprising a caspase inhibitor, a non-caspase inhibitor anti-cancer agent, and a pharmaceutically acceptable carrier, wherein the non-caspase inhibitor anti-cancer agent is selected from the group of an anti-metabolite, a DNA interactive agent, a topoisomerase inhibitor, a tubulin interactive agent, and an anti-hormonal agent; and

administering the composition of claim 12 to the subject having cancer, whereby said administering is effective to enhance killing of the cancer cells, as compared to the anti-cancer agent alone, and thereby treat the cancer.

16. (currently amended) A method of inhibiting the growth of a cancer cell comprising introducing a caspase inhibitor to the cancer cell, wherein said introducing, alone, is effective to inhibit growth of the cancer cell.

17. (previously presented) The method of claim 16, wherein the cancer cell is killed.

18. (currently amended) A method of treating a subject having cancer comprising administering to the subject a pharmaceutical composition consisting essentially of a caspase inhibitor in a pharmaceutically acceptable form to the subject under conditions effective to cause cancer cell death, thereby treating the cancer.

19. (previously presented) The method of claim 18, wherein the caspase inhibitor is a pan caspase inhibitor.

20. (previously presented) The method of claim 18, wherein the caspase inhibitor is specific for caspase-3, caspase-8 or caspase-9.

21. (previously presented) The method of claim 18, wherein the caspase inhibitor inhibits the production of a caspase.

22. (previously presented) The method of claim 18, wherein the caspase inhibitor inhibits the activation of a caspase.

23. (previously presented) The method of claim 18, wherein the caspase inhibitor inhibits a signaling pathway of a caspase.

24-37. (cancelled)

38. (new) The method of claim 13, wherein the caspase inhibitor is selected from the group of acetyl-YVAD-aldehyde, acetyl-DEVD-aldehyde, and z-VAD-fluoromethylketone.

39. (new) The method of claim 15, wherein the caspase inhibitor is selected from the group of acetyl-YVAD-aldehyde, acetyl-DEVD-aldehyde, and z-VAD-fluoromethylketone.

40. (new) The method of claim 16, wherein the caspase inhibitor is selected from the group of acetyl-YVAD-aldehyde, acetyl-DEVD-aldehyde, and z-VAD-fluoromethylketone.

41. (new) The method of claim 18, wherein the caspase inhibitor is selected from the group of acetyl-YVAD-aldehyde, acetyl-DEVD-aldehyde, and z-VAD-fluoromethylketone.

42. (new) The method of claim 13, wherein the non-caspase inhibitor anti-cancer agent is Cisplatin, Cyclophosphamide, Altretamine, Bleomycin, Dactinomycin, Doxorubicin, Etoposide, Teniposide, Plicamycin, Chlorambucil, Cyclophosphamide, Ifosfamide, Mechlorethamine, Melphalan, Uracil mustard, Thiotepa, Busulfan, Carmustine, Lomustine, Streptozocin, Carboplatin,

Mitomycin, Procarbazine, Dacarbazine, Altretamine, Amsacrine, Dactinomycin, Daunorubicin, Doxorubicin, Idarubicin, Mitoxantrone, Etoposide, and Teniposide, Methotrexate, Fluorouracil, Fluorodeoxyuridine, CB3717, Azacytidine, Cytarabine, Mercaptopurine, 6-Thioguanine, Fludarabine, Pentostatin, Cyctrabine, hydroxyurea, Vincristine, Vinblastine, Paclitaxel, Prednisone, Dexamethasone, Methylprednisolone, Prednisolone, Tamoxifen, Flutamide, Mitotane, Aminoglutethimide, or Glivec.

43. (new) The method of claim 15, wherein the non-caspase inhibitor anti-cancer agent is Cisplatin, Cyclophosphamide, Altretamine, Bleomycin, Dactinomycin, Doxorubicin, Etoposide, Teniposide, Plicamycin, Chlorambucil, Cyclophosphamide, Isofamide, Mechlorethamine, Melphalan, Uracil mustard, Thiotepa, Busulfan, Carmustine, Lomustine, Streptozocin, Carboplatin, Mitomycin, Procarbazine, Dacarbazine, Altretamine, Amsacrine, Dactinomycin, Daunorubicin, Doxorubicin, Idarubicin, Mitoxantrone, Etoposide, and Teniposide, Methotrexate, Fluorouracil, Fluorodeoxyuridine, CB3717, Azacytidine, Cytarabine, Mercaptopurine, 6-Thioguanine, Fludarabine, Pentostatin, Cyctrabine, hydroxyurea, Vincristine, Vinblastine, Paclitaxel, Prednisone, Dexamethasone, Methylprednisolone, Prednisolone, Tamoxifen, Flutamide, Mitotane, Aminoglutethimide, or Glivec.

44. (new) The method of claim 13, wherein the composition further comprises an antioxidant.

45. (new) The method of claims 44, wherein the antioxidant is selected from the group consisting of non-flavonoid antioxidants, multi-carotenes, beta-carotenes, alpha-carotenes, gamma-carotenes, lycopene, lutein and zeaxanthins, selenium, Vitamin E, tocopherol, vitamin E succinate, trolox, Vitamin C, Niacin, Vitamin A, 13-cis retinoic acid, N-acetyl-L-cysteine, glutathione pro-drugs, sodium ascorbate, pyrrolidine-dithio-carbamate, coenzyme Q10, peroxidases, glutathione peroxidase, catalase, superoxide dismutase, glutathione transferase, glutathione reductase, glucose 6-phosphate dehydrogenase, glutathione, ceruloplasmin, cysteine, cysteamine, flavenoids, and mimetics, analogs and polymers thereof.

46. (new) The method of claim 15, wherein the composition further comprises an antioxidant.

47. (new) The method of claim 46, wherein the antioxidant is selected from the group consisting of non-flavonoid antioxidants, multi-carotenes, beta-carotenes, alpha-carotenes, gamma-carotenes, lycopene, lutein and zeaxanthins, selenium, Vitamin E, tocopherol, vitamin E succinate, trolox, Vitamin C, Niacin, Vitamin A, 13-cis retinoic acid, N-acetyl-L-cysteine, glutathione pro-drugs, sodium ascorbate, pyrrolidine-dithio-carbamate, coenzyme Q10, peroxidases, glutathione peroxidase, catalase, superoxide dismutase, glutathione transferase, glutathione reductase, glucose 6-phosphate dehydrogenase, glutathione, ceruloplasmin, cysteine, cysteamine, flavenoids, and mimetics, analogs and polymers thereof.

48. (new) The method of claim 13, wherein the cancer cell is a glioblastoma or astrocytoma, the caspase inhibitor is a caspase-3 inhibitor, a caspase-9 inhibitor, a caspase-8/9 inhibitor, or a pan-caspase inhibitor, and the non-caspase inhibitor anti-cancer agent is Carmustine (BCNU).

49. (new) The method of claim 15, wherein the cancer comprises a glioblastoma or astrocytoma, the caspase inhibitor is a caspase-3 inhibitor, a caspase-9 inhibitor, a caspase-8/9 inhibitor, or a pan-caspase inhibitor, and the non-caspase inhibitor anti-cancer agent is Carmustine (BCNU).

50. (new) The method of claim 13, wherein the cancer cell is a colon cancer cell, the caspase inhibitor is a caspase-3 inhibitor or a pan-caspase inhibitor, and the non-caspase inhibitor anti-cancer agent is a platinum complex.

51. (new) The method of claim 15, wherein the cancer is colon cancer, the caspase inhibitor is a caspase-3 inhibitor or a pan-caspase inhibitor, and the non-caspase inhibitor anti-cancer agent is a platinum complex.

52. (new) The method of claim 16, wherein the cancer cell comprises a glioblastoma or astrocytoma, and the caspase inhibitor is a caspase-9 inhibitor, a caspase-8/9 inhibitor, or a pan-caspase inhibitor.

53. (new) The method of claim 18, wherein the cancer comprises a glioblastoma or astrocytoma, and the caspase inhibitor is a caspase-9 inhibitor, a caspase-8/9 inhibitor, or a pan-caspase inhibitor.